

Marked-Up Copy ✓  
Serial No: 09/688,817  
Amendment Filed: HEREWITH

IN THE CLAIMS

Please amend the claims to read as follows:

--1. (Twice Amended) A method of forming a layer of metal on a substrate, comprising:

- i) depositing a seed layer of the metal on a first substrate surface which is Ti, said seed layer being sufficient to cover said first substrate surface which is Ti at a substrate temperature of from 220 to 300°C;
- ii) depositing a second amount of metal on said seed layer at a substrate temperature and power that are sufficient to (i) inhibit formation of filamentous metal phases having a resistivity greater than that of said metal, and (ii) provide a metal diffusion rate and a metal deposition rate sufficient to inhibit void formation in an opening having an aspect ratio of at least 2.0; and
- iii) depositing a third amount of metal on said second amount of metal.

22. (Amended) A method of forming a layer of aluminum-containing metal on a substrate, comprising:

- i) depositing a first amount of a metal comprising aluminum on a seed layer of the metal, said seed layer [bing] being sufficient to cover a substrate surface comprising titanium, at a substrate power sufficient to inhibit formation of a phase of  $TiAl_3$  having a resistivity

greater than that of said metal said seed layer of metal being deposited at a substrate temperature of from 220 to 300°C; and

ii) depositing a second amount of metal on said first amount of metal.

24. (Amended) A method of forming a layer of aluminum-containing metal on a substrate, comprising:

i) depositing a first amount of a metal comprising aluminum on a seed layer of the metal, said seed layer being sufficient to cover a substrate surface, at a substrate power sufficient to inhibit formation of a phase containing said metal having a resistivity greater than that of said metal and at a metal diffusion rate and a metal deposition rate sufficient to inhibit void formation in an opening having an aspect ratio of [ate] at least 2.0 said seed layer of metal being deposited at a substrate temperature of from 220 to 300°C; and

ii) depositing a second amount of said metal on said first amount of metal.--